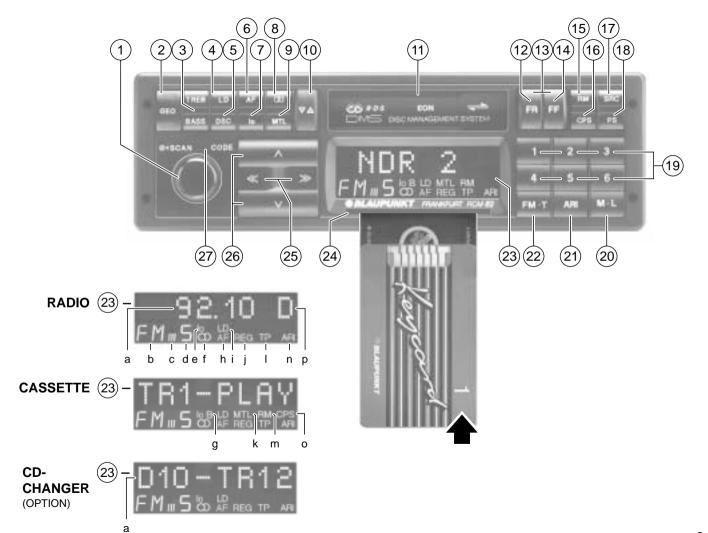
## **Operating instructions**



# Frankfurt RCM 82



## **Front Panel Description**

1 ON/OFF

Switch on the set by turning the knob. **Volume control:** 

Volume Control.

by turning the knob

SCAN (search operation):

Pressing the knob for approx. 1 sec. will either sample the programmes to be received during radio operation or the following CD songs during CD operation (CD changer only).

(2) **GEO** button (broader interior sound impression)

**Bal**ance (left/right volume): Adjust with rocker switch <</>> (25).

Fader (front/rear volume):

Adjust with rocker switch  $\Lambda/V$  (26).

(3) **AUD** button

**Treble** - Reproduction of the high frequencies

Adjust with rocker switch <</>>> 25).

**BASS** - Reproduction of the low frequencies

Adjust with rocker switch  $\Lambda/V$  (26).

(4) LD button (Loudness)

Press this button to boost the bass frequencies at low volumes. This will lead to a more natural sound impression.

5 DSC button (Direct Software Control) This button is used for programming special functions of your car stereo.

6 AF button

When AF is on and RDS activated, the radio will automatically tune to a frequency offering better reception of the same programme.

7 lo button

This button is used for altering the sensitivity of the automatic station seek operation

- lo normal sensitivity ("lo" (23) e is indicated)
- dx high sensitivity ("lo" 23 e disappears)

Additional function of the lo button: Switching from stereo to mono: Press for longer than 2 seconds.

DI button (Dolby-NR)
 Use this button to activate noise suppression during tape playback.

(9) MTL button (metal)
Press this button when chromium dioxide (CrO<sub>2</sub>) or metal cassettes are played. Switch off this function by

∆∇ button (Autoreverse)
 Automatic change from one side of the tape to the other

pressing the MTL button once again.

(11) Cassette compartment

(12) FR button

Fast rewinding of the tape. Stop with FF button.

(13) Cassette eject
Press both buttons.

14) FF button

Fast forwarding of the tape. Stop with FR button.

15 RM button (Radio Monitor) Use this button to listen to the radio while advancing or rewinding the tape.

#### (16) CPS button

To repeat or skip music tracks on the cassette. "CPS" illuminates on the display (23) o.

### (17) SRC button (Source)

This button is used for shifting from one audio source to another (cassette ◆ radio ◆ CD ◆ cassette).

- (18) **PS** button (**P**reset Station **S**can )
  Pressing this button briefly samples all memorized stations of the selected waveband (FM, MW, LW).
- (19) Preset buttons 1, 2, 3, 4, 5, 6 Store station - Keep button depressed during radio operation until the station becomes audible again. Recall station - Briefly press the respective button.
- 20 M•L button (Medium wave Long wave)

This button is used for selecting either the medium wave (MW) or long wave (LW) frequencies.

Press button again for shifting between MW and LW.

#### 21) **ARI** button

Use this button to reproduce traffic stations only.

Your radio only plays stations which broadcast traffic announcements.

22 FM•T button (Frequency Modulation) FM button

This button is used for shifting between the different FM storage levels I, II, III and T (Travelstore).

### 23 Display

### 24 KeyCard slot

To switch on the set insert KeyCard in the direction of the arrow.

Remove KeyCard: Press on the card.

### 25 << / >> rocker switch

Radio: Fine tuning of stations
CD changer (option):
Selecting a CD >> upwards
<< downwards

#### (26) ∧/∨ rocker switch

Radio: Automatic selection of

a station

CD changer (option):

Pressing rocker switch shortly:

∧ Skip to next title∨ Skip to previous title

Pressing rocker switch longer:

∧ Cue

∨ Review

### (27) Code LED

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## **Important Notes**

## What You Should Read By All Means!

Before starting to use your new car radio, you should carefully read through the safety notes and the information about the 'KeyCard'.

### **Safety Notes**

Being the driver of a motor vehicle you should dedicate your full attention to the traffic around you. Therefore always use your car stereo such that you are able to cope with the present traffic situation in any moment.

In difficult driving situations you should turn your set off. Please take into account that at a speed of 50 km/h you are almost covering a distance of 14 m per second!

When adjusting the volume, always make sure that acoustic signals from the outside can still be heard in order to be able to react to alert signals just as it is required by the present situation.

If you would like to mount or expand the unit by yourself, you should by all means read through the enclosed mounting and connection instructions before.

Do not connect the loudspeaker outputs to ground!

Only use the accessory and replacement parts approved by Blaupunkt.

Due to the high output power of the output stage, the metal housing of the set may heat up considerably. Therefore never touch this metal enclosure when removing the unit.

## **KeyCard**

Your car radio is theft-protected and cannot be operated without the KeyCard. Therefore, other people cannot make use of your set. Since it is not possible to utilize the car radio with another KeyCard, it will be of no worth at all for a thief - in case the KeyCard was removed before.

### Wrong KeyCard

If a wrong KeyCard is inserted, four dashes are first represented on the display ('----') before the indication changes to 'CARD ERR'. During this period the set cannot be operated even with the right KeyCard.

 Remove the false card. Now the correct card has to be inserted by all means.

After the third false try it will take one hour before the set can be operated with the correct card. In the meantime, '----' is indicated on the display.

After another 7 wrong attempts, the car stereo can only be put in operation by one of our authorized service partners. For this, the car radio passport has to be presented.

Switching the car stereo off during the waiting period will set the waiting time to 'zero' after the unit has been activated again.

### **KeyCard Lost**

If you have lost your KeyCard or if it was damaged, one of our authorized service partners will help you against presentation of your car radio passport.

These service partners are designated by (
) in the radio's service register. If required, call the service centre of your country for detailed information about your local Key-Card service facility.

#### **Telephone Connection**

When operating a cartelephone in your vehicle, radio, CD or cassette reproduction can be muted automatically.

For this, however, the car telephone must be connected to the unit just as it is described in the connection instructions.

## **Amplifier Section**

#### ON/OFF

For switching the set on,

- turn button (1) clockwise and
- insert the KeyCard completely.
   Your stereo is now ready for operation.

For switching the set off,

- turn button (1) counterclockwise or
- remove the KeyCard (24).
   First press on the KeyCard (to release it) and then take it out of the slot.

#### **Balance and Fader**

With two loudspeakers installed, you can **balance** the sound impression left/right; with four speakers available, you can also adjust the sound pattern of the front and rear level **(fader)**.

The balance and fader function is activated by pressing the GEO button 2.

#### **Balance**

For balancing the sound level left/right:

Press the GEO button 2.
 The display 23 a gives you BAL (Balance) or FAD (Fader) plus a number between -9 and +9.

Press the rocker switch <</>> <25 left/right. The sound of the left and right channel is balanced; the number on the display changes between -9 and +9. The display indication automatically stops at '0' (= sound of the left and right channel is balanced).</li>

#### Fader

For balancing the sound level front/rear (**Fader**):

- Press the GEO button 2.
   The display 3 a gives you BAL (Balance) or FAD (Fader) plus a number between -9 and +9.
- Press the rocker switch ∧/∨ ② up/ down. The sound of the front and rear channel is balanced; the number on the display changes between -9 and +9. The display indication automatically stops at '0' (= sound of the front and rear channel is balanced).

The adjustment is terminated by pressing the GEO button ② once again; otherwise, the display will automatically return to indication of radio or cassette functions approx. eight seconds after the last setting has been carried out.

### **Controlling Treble and Bass**

#### **Treble Control**

For controlling the high frequencies:

- Press the TREB button 3.
   The display 23 a gives you TRE or BAS and a number between -6 and +6.
- Press the upper part of the rocker switch <</>> <sup>25</sup> for boosting the treble or the lower part for treble reduction. The number on the display changes between -6 and +6. It will automatically stop at the '0' position (normal).

#### **Bass Control**

For controlling the low frequencies:

- Press the BASS button 3.
   The display 23 a gives you BAS or
   TRE and a number between -7 and +7.
- Press rocker switch <</>> <25 to the right for boosting the basses or to the left for bass reduction.</li>
   The number on the display changes between -7 and +7. It will automatically stop at the '0' position (normal).

The treble and bass adjustment is terminated by pressing the BASS or TEB button 3 once again; otherwise, the display will automatically return to indication of radio or cassette-functions approx. eight seconds after the last setting has been carried out.

## **Switching from Stereo to Mono**

For switching from stereo to mono:

 Press the lo button 7 for more than two seconds.

For stereo reproduction, the stereo sign will light up on the display f.

When switching the unit on, stereo sound reproduction is adjusted.

When the signal strength gets poor, the set will automatically switch to mono.

#### Loudness

At low volumes, the human ear shows reduced sensitivity to low frequencies, while medium and high frequencies can be perceived better.

The loudness function compensates this phenomenon by boosting the low frequencies. For activating or deactivating it:

Press the LD button 4.
 If the loudness is on, 'LD' is shown on the display 23 i.

You can individually programme at which level you want the set to start boosting the basses (see chapter 'Programming').

### **Radio Section**

In the FM mode, we generally recommend to make use of the RDS service.

As soon as a programme can be identified, the station logo and possibly the regional identification, e.g. the German NDR1 NDS (for Lower Saxony) appear on the display. Withe RDS, the preset buttons become programme buttons. Now you know exactly which programme your set has currently tuned in, making it thus very easy to choose the desired station.

### **AF - Alternative Frequency**

The AF function (Alternative Frequency) provides that the car stereo automatically tunes in to the programme frequency which offers the best reception quality.

This function is on, if AF lights up on the display (23) h.

Switch AF on/off by

pressing the AF button 6.

The radio reproduction is muted for a moment while searching for the frequency offering the best reception quality of a programme.

## **Selecting the Desired Waveband**

With your car radio you have free choice from the following wavebands:

FM (ultra-short wave; frequency-modulated), MW (medium wave), and LW (long wave).

### Selecting FM

Briefly press the FM•T button 22.
 'FM' lights up on the display 23 b.

### Selecting MW or LW

Briefly press the M•L button 20.
 'M' for MW or 'L' for LW lights up on the display 23 b.

For changing between MW and LW:

Press M•L 20 once again.

If nothing else is indicated, the following operating notes hold for all wavebands.

# Tuning in a Station Automatically

### **Tuning in the Following Station**

 Press the upper part of the rocker switch ∧/∨ 26.

The car stereo automatically starts searching for the next station.

### **Tuning in the Previous Station**

 Press the lower part of the rocker switch \( \sqrt{\sqrt{26}} \).

The car radio automatically starts searching for the previous station.

If the rocker switch  $\wedge/\vee$  (26) up/down is kept depressed, the station seek operation continues to be carried out quickly in the corresponding direction.

### **Manual Tuning**

All stations can also be tuned in 'manually':

Press the rocker switch <</>> <25 on the left or the right. The frequency band is scanned in small steps.</li>

# Reception of Regional Programs (FM)

Many of the programs of the broadcasting corporarations are split up into regional programs at certain times. For example, the first program of NDR (Northern German Broadcasting) provides the northern Federal German States of Schleswig-Holstein, Hamburg and Lower Saxony with differing regional programs at times.

If you receive a regional station and would like to continue listening so that station:

 Keep the AF button (6) depressed for longer than 2 seconds, until the display
 (3) j briefly shows "REG". The regional function is activated.

This function is deactivated by pressing the AF button for longer than 2 seconds again. The "REG" indication disappears.

# Adjusting the Station Seek Sensitivity

You can change the seek tuning sensitivity in the FM and  $M \cdot L$  range.

For receiving only powerful nearby stations (low sensitivity),

press the lo button 7 until 'lo' illuminates on the display 2 e.

If you would also like to search for weaker stations (higher sensitivity):

Press button lo 7 once again.
 The 'lo' indication goes out in the display 23 e.

The sensitivity level can be further varied in both modes (see chapter 'Programming').

### **Memorizing a Station**

You can memorize a station with each of the preset buttons (19).

For FM, each preset button (19) can be allocated four times, i.e. four stations can be stored on one button. The display (23) c shows you the corresponding assignments (I, II, III stand for first, second, and third allocation; T stands for Travelstore (for Travelstore information see the following chapter)).

For jumping from one stored station to another:

Press the FM•T button (22).

For memorizing a station:

- Choose the storage level (only FM); for this, press FM•T (22) until I, II, III, or T is lit on the display (23) c.
- Tune in the station (see chapter Automatic/Manual Tuning of Stations).
- Press the desired preset button (19) until the radio resumes play (approx. 2 seconds) or BEEP is audible.
   From the display (23) d you can see which button is currently pressed.

Now the station is stored.

#### Note:

When tuning in an already stored station, the display (23) c will show the corresponding preset button for approx. three seconds. In addition, for FM, the display (23) d will also give you the storage level.

# Automatically Storing the Strongest Stations

### (Travelstore)

With Travelstore, you have the opportunity to automatically store the six strongest FM stations of your respective region and have them sorted according to their signal strength. This feature is of special use while travelling.

 Press the FM•T button 22 for at least two seconds.

The set searches for the strongest FM stations and sorts them on the 'T' storage level (Travelstore). Once the process is finished, the car radio automatically tunes in to the strongest station.

If required, it is also possible to manually store a station on the Travelstore level. If less than six stations can be received, the free buttons are represented by dashes for a short moment.

### **Activating a Stored Station**

If required, the memorized stations can be activated at a keystroke.

- Choose the storage level (only FM).
   For this, press FM•T (22) until I, II, III, or T lights up on the display (23) c.
- Briefly press the corresponding preset button (19).

### **Briefly Sampling a Station**

#### (Radio Scan)

Starting with the currently tuned in station, you can have the following ones briefly sampled for approx. eight seconds each.

Press the Scan button 1 for approx.
 1 sec.

The display ② a gives you 'SCAN'. If the following station is found, it is reproduced for approximately eight seconds. The station's frequency starts blinking on the display ② a; if it has already been memorized, the corresponding preset button starts blinking on the display ② d. In addition, for FM stations, the storage level indicator lights up on the display ② c. Then the set starts searching for the next station.

For selecting a sampled station:

Press the Scan button 1 once again.
 The Scan function is off.

After the search operation has been concluded, and no station has been chosen, the radio starts playing the station from which Radio Scan was started before.

## Sampling Memorized Stations with PS

All memorized stations of a waveband can be briefly sampled.

Press the PS button (8).
 The car radio will then start introducing all memorized stations of the selected waveband one after another.
 If no station is stored on a preset button, this button is skipped.

If you want to cancel this function:

Press the PS button (8) once again.
 The radio keeps playing the sampled station.

## Reception of Traffic Programmes with RDS-EON

Various FM broadcasters transmit traffic announcements at some time of the day. Your radio identifies these traffic programme stations and gives the **TP** indication - **T**raffic **P**rogramme - on the display 3 I. Other radio networks do not air traffic messages by themselves, but transmit the **TP** code of another radio network with traffic information service (e.g. BBC2).

If the ARI function is activated (ARI illuminates on the display (23) n), your radio will automatically switch to the traffic programme station (e.g. GLR) for the duration of the traffic announcement and will switch back again to the previous station (BBC2) after the end of the message. Traffic messages are 'put through' with a preset volume, the level of which can be programmed (see chapter 'Programming'). The set automatically interrupts cassette or CD playback and resumes play as soon as the message is over.

## Switching Traffic Messages (ARI) On and Off

This function allows you to mute all the stations which do not broadcast traffic announcements

For switching ARI on and off

Press the ARI button 21.
 If traffic radio is on, 'ARI' lights up on the display 23 n.

If you press the ARI button when listening to a traffic message, the ARI priority is deactivated for this message. The radio switches over to the operating mode which was activated before the traffic message. But ARI priority remains activated for the further traffic messages.

If your radio is tuned to a station without ARI code, the acoustic alarm will be produced after approx. 4 seconds.

Tune to another station.

When pressing the ARI button while listening to an MW or LW station, the unit automatically switches to the FM traffic station tuned in last.

#### **Acoustic Alarm**

When leaving the coverage area of the tuned in traffic station, your car radio automatically sends out an acoustic alarm after approximately 30 seconds.

This alarm tone can also be heard when pressing a preset button with no ARI station allocated to it.

For switching off the acoustic alarm,

 search for a new station (see chapter 'Tuning in a Station Automatically'). The set will then start searching for the next traffic station.

## **Automatic Start of the Station Seek Operation**

(cassette playback)

When leaving the coverage area of the tuned in traffic station, your car radio will automatically start searching for a new traffic station while you are listening to your cassette. During the seek operation, an alarm tone is sent out.

## **Tape Section**

### Inserting a Tape

If you want to listen to a tape:

- Switch on the set.
- Insert the cassette halfway into the slot with side 1 up and without applying force; the cassette will be loaded automatically.

The cassette side which was played last will be reproduced.

From the display ② a you can see which side is currently played. (TR1 = side 1)

### Removing the Tape

To stop tape play:

Press the ≜ buttons (3) simultaneously.

The cassette is ejected.

## Fast Forwarding and Rewinding the Tape (FF/FR)

### **Fast Forward Operation**

Press button FF (14).
 On the display (23) a e.g. the '<< >>' symbols illuminates to indicate fast tape operation. Once fast forwarding is finished, the reversed side will start to play automatically.

#### **Stopping Fast Forward Operation**

Press button FR.

### **Fast Rewind Operation**

Press button FR 12. On the display 23 a e.g. the '<< >>' symbols illuminates to indicate fast tape operation. Once fast rewinding is finished, the same side will start to play automatically.

### **Stopping Fast Rewind Operation**

Press button FF.

# Radio Reception during FF or FR Operation

During cassette operation, the radio section is off. However, you are free to choose if you want to listen to the radio while the tape is forwarded or rewound:

Press the RM button 15.
 When the function is on, 'RM' lights up on the display 23 m.

# Autoreverse (Changing the Tape Side)

If you want to change to the other side of the cassette while listening to it:

Press button △∇ 10.
 The display indication 23 a) changes

from (TR1-PLAY → TR2-PLAY).

Once the end of the cassette is reached, the set automatically switches to the other side.

#### Note:

When using stiff-going cassettes, the set may switch over to the other side although this is not desired. When this happens, check the tape wound up so far; in these cases, fast forwarding or rewinding it often helps.

### Dolby-NR\*

This set allows it to play cassettes which have been recorded with Dolby-NR.

These cassettes distinguish by their reduced background noise and improved dynamic characteristics.

For switching Dolby-NR on or off:

- Press the DD button 8.
   If Dolby NR is on, 'B' illuminates on the display 23 q.
- \* Noise reduction system manufactured under license from Dolby Laboratories. 'DOLBY' and the double-D symbol are trademarks of Dolby Laboratories.

### **Tape Selection**

To play METAL or CrO<sub>2</sub> cassettes

 press the MTL button (9), "MTL" lights up on the display (23) k.

Press this button once again to switch off this function. "MTL" goes off in the display.

## Changing the Audio Source with SRC

You can shift between the connected audio sources in the following order:

Cassette ◆ radio ◆ cassette

For switching to another audio source with the cassette being inserted:

• Press the SRC button 17.

The car radio shifts to radio operation.

Tape play is stopped; the audio head and the pinch roller are released. By this, both the cassette and the cassette mechanism are protected (standby operation).

## Skipping/Repeating Tracks with CPS

Your car stereo is equipped with a Cassette Program Search feature (CPS). This function detects the beginning of the taped songs, and it can be used to fast forward to the beginning of the next one or to rewind to the beginning of the current song.

### Skipping a Track

For skipping a track,

- activate CPS using button 16, so that "CPS" lights up on the display 23.
- Press button FF (14). On the display (23) a "TR1 (or 2) << >>" lights up; the tape is fast forwarded.

Having reached the beginning of the next song, FF stops and the song is played.

#### Repeating a Track

If you want to listen to the current song once again,

press button FR 12.
 On the display 23 a "TR1 (or 2) - <</li>
 >>" lights up and the tape is rewound.

Once the beginning of the current song is reached, the latter is played again. You can still repeat the previous track up to eight seconds after the new one has started.

#### Note:

It is only possible to skip or repeat songs if the in-between blanks are at least three seconds long.

#### **Care Notes**

We recommend C-60 and C-90 type tapes for use in any automobile tape player; to protect your tapes, store them in a cool place away from dirt, dust, or excessive temperatures above 50° Celsius. In order to ensure smooth tape operation, cold tapes should be allowed to heat up a bit before they are played. If dust collects on the audio head or the rubber roller, problems related to rough tape operation or poor sound quality may occur after approx. 100 hours of operation.

For normal contamination, use a headcleaning cassette to remove the dust; for more intensive contamination, use a cottonwool tip soaked with alcohol. Never use hard tools!

## **CD Changer (Option)**

This car radio gives you the opportunity to remote control a Blaupunkt CD changer (e.g. CDC-M1, -M3, -A03\*, -F03\*).

For detailed information about how to operate the CD Changer, please refer to the operating instructions of your changer.

\*) Available end 1992

### Playing a CD

For listening to a CD, you will have to switch to the CD changer:

 Press the SRC button (7) until either the Disc/Track (i.e. CD number/title number) or Track/Time (i.e. title number/playing time) indication lights up on the display (23) a (see also chapter 'Programming with DSC').

The CD is played.

### Changing the CD

For playing the next CD, proceed as follows:

Press the rocker switch <</>>> 25 on the right.

For playing the previous CD:

Press the rocker switch <</>> 25 on the left.

## Skipping/Repeating a Track (Cue/Review)

For playing the next title

 briefly press the upper part of the rocker switch ∧/∨ (26).

For playing the previous title

 briefly press the lower part of the rocker switch ∧/∨ (26).

#### **Cue (Fast Forward)**

 Press the upper part of the rocker switch ∧/∨ (26) for longer than one second.

### **Review (Fast Backward)**

 Press the lower part of the rocker switch \( \lambda \subset \quad \text{26} \) for longer than one second.

### **Briefly Sampling a Track**

#### **CD Scan**

Starting from the track currently played you can briefly sample the following tracks of the CD for approx. ten seconds each:

Press the Scan knob ① approx. 1 sec.
 The display ② a will give you "SCAN".
 The next track is played.

If you want to keep on listening to the sampled track:

 Briefly press the Scan button 1 once again for approx. 1 sec.
 The Scan function is deactivated and the song is continued to play.

## Changing the Audio Source with SRC

You can shift between the connected audio sources in the following order:

Changer ♦ cassette ♦ radio ♦ changer For switching to another audio source:

Press the SRC button (17).

The car radio switches over to the next audio source.

# Connection e.g. of a Cassette or DAT Player

Having connected an external sound system (via the AUX socket) you can switch between the audio sources using the SRC button (7) (cassette ♦ radio ♦ external unit ♦ cassette). The display (23) a will give you "AUX".

## **Programming with DSC**

The car radio's DSC function (Direct Software Control) allows it to adapt several adjustments and functions according to your personal preference and to store these individual settings.

# Adjusting the Volume of Traffic Messages (ARI)

You can preselect the volume of ARI traffic messages (see chapter Traffic Messages). For changing the volume,

- press the DSC button 5.
   The display 3 a shows "BEEP ON" or "BEEP OFF".
- Press the rocker switch A/V 26 until the display 23 a gives you "ARI" and a number between 1 and 9 as a volume indication.

The car radio's volume is identical to the volume of the traffic messages.

For altering the setting,

press the rocker switch << / >> 25
 (left - lower; right - higher).
 The number on the display is changing correspondingly.

For memorizing your personal adjustment,

press the DSC button (5) once again.

# Acoustic Signal after the Actuation of a Key (BEEP)

All functions which require for a keystroke longer than two seconds (e.g. memorizing a station) are confirmed by an acoustic signal (BEEP).

For switching the BEEP tone on or off,

- press the DSC button (5).
   The display (3) a gives you "BEEP ON" or "BEEP OFF".
- Using the rocker switch << / >> 25 you can select between 'BEEP ON' (acoustic signal on) and 'BEEP OFF' (acoustic signal off).

For memorizing your adjustment,

press the DSC button (5) once again.

## **Choosing the Display Colour**

With this set you can match the display colour to the colour of your vehicle's dashboard lighting. You can choose between green and orange.

For changing the display colour,

- press the DSC button 5.
   The display 3 a gives you "BEEP ON" or "BEEP OFF".
- Press the rocker switch << / >> 25 until
   'COLOUR' lights up on the display
   (23) a.

For changing the colour,

 press << />> </>> <sup>(25)</sup>, and the display colour will change.

For storing this adjustment,

press the DSC button (5) once again.

### Theft Protection by Code LED

As a preventive measure, you can let a lightemitting diode (LED) ② blink in the car's interior when it is parked.

For modifying the setting,

- press the DSC button (5).
   The display (23) a gives you "BEEP ON" or "BEEP OFF".
- Press the rocker switch ∧/∨ 26 until 'LED' and a number light up on the display 23 a.
- Via the rocker switch << />>> 25, you can adjust the following:

LED 0 - Blinking is off.

- LED 1 LED only blinks if the car radio is connected via the ignition.
- LED 2 LED blinks, if the car radio is switched off (using the ON/ OFF-button, KeyCard or ignition).

#### Loudness

Since your in-car sound quality is influenced by the type of the installation (amplifier), the type and arrangement of the loudspeakers, and the vehicle itself, you may individually programme at which level you want the set to start boosting the basses (loudness).

For changing this loudness level,

- press the DSC button (§).
   The display (②) a gives you "BEEP ON" or "BEEP OFF".
- Now press the rocker switch A/V 26 until 'LOUD' and a number between 1 and 6 illuminate on the display (23) a.
- With the rocker switch << / >> (25) you can match the above mentioned loudness level to your personal requirements.

For memorizing this adjustment,

press the DSC button (5) once again.

### **Preset Naming**

When you select a station, the display ② a will give you the frequency and for RDS stations also the station name later on, e.g. 91.3 → BBC3. You can replace the frequency indication of all preset stations without RDS code by entering an 8-digit name. Note the following:

The stations must be stored on the storage levels I-III.

For entering a station name, proceed as follows:

- Press the DSC button 5.
   The display 23 a gives you "BEEP ON" or "BEEP OFF".
- Press the rocker switch \( \lambda \rangle \text{ \( \lambda \)} \) (26) until 'PRESET' is illuminated on the display (23) a.
- Choose the desired station (via the preset buttons), for which the name is to be entered.

The station frequency, e.g.

\_\_92.1\_\_

is indicated on the display ② a. The remaining fields are marked with "\_". When entering the first character, the frequency disappears and is replaced by further dashes. The first dash is blinking. For changing it and entering the desired character:

 Press the rocker switch << / >> (25) on the right continuously.

The display will give you one after the other the capital letters (A-Z), the umlauts, the special characters and the numbers 0-9. For selecting a character:

Press the ON/OFF button 1.
 The selected character stops blinking while the next character starts to flash.

For modifying the previous character:

 Press the ON/OFF button (1) for longer than two seconds.

Once you have finished your entry, press the corresponding preset button of the next station, which you would like to be named. The entered name for the previous station is then automatically stored.

For storing the adjustment:

• Press the DSC button 5 once again. Every time the station is selected, the specified name will be represented on the display. The zone identification for traffic messages (ARI) is no longer indicated.

A memorized station name can be deleted by storing a new station on this button (i.e. keeping the respective preset button depressed for a longer period).

# Sensitivity of the Automatic Station Seek Operation

In areas with an extremely high or very low station densitity it might be useful to alter the sensitivity of the automatic station seek (lo or dx button).

For changing the sensitivity:

Press the DSC button 5.
 The display 23 a gives you BEEP ON or BEEP OFF.

- Press the A/V rocker switch 26 until 'LOCAL' and a number between 1 and 3 appear on the display 23 a.
   LOCAL stands for local reception.
- Adjust the sensitivity with the << />
  rocker switch (25):
   01 corresponds to high sensitivity
   03 corresponds to low sensitivity

If required, use the rocker switch  $\wedge/\vee$  (26) to select "DIS" (distant reception) and change the sensitivity.

For memorizing the setting:

Press the DSC button (5) once again.

# Survey of DSC settings adjusted ex factory

BEEP : ON COLOUR : orange

LED : 2

LOUD : 3
PRESET : --LOCAL : 1

DIS : 1

ARI : 5

## **Appendix**

#### **Technical Data**

**Amplifier** 

Output power: 4 x 25 watts RMS acc.

to DIN 45324/3.1 at 2  $\Omega$ 

FM:

Sensitivity:  $0.9 \mu V$  at 26 dB

signal-to-noise ratio

Frequency

response: 35-16 000 Hz (-3 dB) Selectivity: > 80 dB at ±300 kHz

 $> 40 \text{ dB at } \pm 200 \text{ kHz}$ 

Crosstalk

attenuation: > 30 dB at 1kHz

**Tape Section:** 

Frequency

response: 30 - 18 000 Hz (-3 dB)

Wow-and-flutter: 0.25% typ.

Signal-to-noise

ratio: 64 dB typ. with Dolby B

56 dB typ. without Dolby

**AUX-IN:** Input impedance 10  $k\Omega$ 

**Preamp-Out:** Output impedance

150  $\Omega$ 

## What to Do If Your Car Stereo Needs Service?

Whenever your car radio fails to operate properly, and therefore needs to be repaired by an authorized service centre, please do not forget to bring the car radio passport and the KeyCard along with you.